CENTRAL INTELLIGENCE AGENCY

INFORMATION REPORT

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SECURITY INFORMATION

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Dismantling

1. Production of buna is maintained at the rate of 20,000 tons per year. The following buildings are being dismantled:

		Degree of dismantling
F 59		
E 58		
E 60	(a polymerization plant)	completely
E 46	(a dressing plant)	"
B 60	(a styrol oven)	"
F 47	(an iron chloride water purifying plant	50%
E 45	(Emulgator 1000)	50%
B 52	(styrol tank storehouse	50%
C 53	(styrol distillation)	50%
H 77	(styrol contact installation)	completely

Also laboratory installations for technical development and research.

The dismantling began about 20 April 1948, and is proceeding according to plan.

Production

2. a.

Product	Number of Tons	Need for Carbide (in tons)
Buna S.	2000	8600
Acetic Acid	1500	2500
Ethylene Oxide	500	1900
Vinyl Chloride	1300	1900
Tetrachlorethan	700	400
SS Oil (lubricating oil)	500	3300
		18600

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Increase of manufacture from acetaldehyde

Butanol	1000 tons	2800 tons
Alcohol	1300 "	2600 "
		24000 tons

This amount of carbide is based on a daily production of 800 tons. There are eight ovens, of which seven are in operation; the eighth is being overhauled.

b. Present Production Program

Of the 6000 tons of acetaldehyde a month which are unreserved, 3000 tons monthly are used for reparation purposes, either as paraldehyde or partially as alcohol. Russia prefers alcohol at present. The remaining 3000 tons monthly are used to increase the production of acetic acid, ethylene oxide and lubricating oil (SS-oil).

c. Factors

Carbide factor for Buna S	formerly	4.088	now	4.3
Acetic acid	"	1.526	"	1.65
Vinyl chloride	"	1.34	"	1.46

Caustic potash, solid, for Buna	.007 (Butadien drying)
" " " " vinyl chloride	.007 (acetylene drying vinyl chloride drying)
Paraldehyde for Acetaldehyde	1.1

d. New Developments and Production since 1945:

Capacities:

Palatinol C	650 tons a year	increased
Palatinol AH	650 tons a year	reduced
Vinyl Chloride	7200 tons a year	
"Igelitweichfolie"	240 tons a year	(60% PCU, 40% Palatinol BH or AH
Igelit window glass	1800 " " "	(80% PCU, 20% Palatinol BH or AH)
Trichlorethylene	5000 " " "	
Perchloroethylene (compulsory production)	250 " " "	(Process for production of tetrachloroethane improved)
Ethylene oxide	6000 " " "	
Acetic acid, techn.	18000 " " "	
Acetate is increased to	11,000 tons a year	
methyl acetate	4,000 t.	
ethyl acetate	4,000 t.	
butyl acetate	3,000 t.	
Buna S.	20,000 tons a year	
Carbide	290,000 " " "	

e. New Developments and Production since 1945:

1) Isopropanol 200 tons a year
Acetone is conducted by 300 atmosphere absolute pressure and 120° over copper or nickel catalysers

2) Acetates are increased to 11,000 tons a year
Process 1945/46 periodically, from 1948 continuously. Butyl acetate is favored as a medium of refining.

3) A 48 and A 62 are produced as by-products of Butadien manufacture through hydrogenation of Butadian oil.

4) Ethylene glycol was developed in the apparatus used for glycol. The apparatus can run only alternatively either with 600 tons of glycol or 600 tons of ethylene glycol. Process: alcohol and ethyl oxide at 30 atmospheres absolute pressure and 70-80°. Important for the lacquer industry.

5) Brake fluid is formed as a by-product of ethylene glycol or alternatively 20 - 80%. Reaction product of 1 alcohol and 2 ethyl oxide - 76%. 24% glycol.

6) Ethylic ether: Compulsory by-product of alcohol ethylene. Discovered by use of bad contacts. With good contacts as in 1948 no production of ethylic ether. Product is very impure.

7) Oxide wax: Capacity 120 tons a year. Process: Ethylene oxide and potassium alcoholate at normal temperature.

8) Triethanolamin: 120 tons a year.
Process: Ethylene oxide and aqueous ammonia at a low temperature.

9) Alkacid lye: 1200 tons a year.

10) Paraformaldehyde solid:
Process: concentrated formaldehyde at a high temperature in a vacuum. Manufacture resumed since the middle of 1947.

11) Paraldehyde (recently for Russia):
Process: Acetaldehyde is pumped around in an "Aldoysator" (charcoal burner circulation system) with small amounts of sulphuric acid (to 3000 liters of acetaldehyde, 10 liters of concentrated sulphuric acid at 20-25°).

12) "Palatinole" and "Elaol" both new:
Esterification with sulphuric acid admixture of 1%.

13) Phtalopal BU: 150 tons a year.
From 1.3 Butandiol and phthalic(acid) anhydride, one mole of each, with elimination of 1 water mole. Yield 95% of theory.
Process: Heat approximately 20 hours until a certain acid number is attained.
Is used as artificial resin lacquer.

14) Akydal P liquid for oil varnishes mixable with pigments. 600 tons a year.
Condensation product from butyl aldehyde, "Crodonaldehyd" and phthalic (acid) anhydride.

15) Hexamethylenetetramine

16) Phthalein: Manufacture again given up because of poor yield.

17) Chloroacetic acid, 600 tons a year.
Is under construction. Process: trichlorethylene is saponified with 85-90% sulphuric acid at 160°.

18) "Diproxyd"
Process: First step "Isopropanol" is converted with solid ground caustic soda or caustic potash to "Alkoholat" (fluid), cooled off (viscous) and treated in parts with carbon disulphide at a lower temperature (solid). It forms "Isopropylxanthogenat". Second step: The "Isopropylxanthogenat" is oxydized with sodium persulphate in a watery solution.

19) "Sapal" and Emulgator MF
Sapal is a textile, dyeing and laundry aid. Emulgator MF is used for watery emulsions from mineral oils and fat oils (oil obtained from boring and spindle oil). Combined capacity 90 tons a year. Process: Butylen and propylen are polymerized with anthracite coal containing phosphoric acid to olefins C8 - C16. The olefins are converted with phenol (heated with aluminum chloride) to alkyl phenol and with ethylene oxide.
Sapal has a higher, Emulgator MF a lower oxide content.

20) Rubresin
Rubresin is a gum for synthetic rubber.
Process: Ethyl phenols are boiled with formaldehyde.

21.) Acrylic nitrite
Ethylene oxide and hydrocyanic acid are condensed under efflux of water to "cyanhydrin" and heated with contact (aluminum oxide 160 - 250°).
Capacity 60 tons a year.

22) Polystyrol PB
Capacity 60 tons a year, monostyrol is polymerized (block-polymerization) at 30 - 120° with very small amounts of activators (benzol peroxide).
The product is transparent and colorless. This is a reparations order.

23) Perbunan
Acrylic nitrite is polymerized with "Butadien".

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[redacted] Comment: The term "contact" as found in the text may possibly mean "catalyst".)